



JIM JONES  
Director

## County of Los Angeles INTERNAL SERVICES DEPARTMENT

1100 North Eastern Avenue  
Los Angeles, California 90063

Telephone: (323) 267-2103  
FAX: (323) 264-7135

*"To enrich lives through effective and caring service"*

March 1, 2016

To: Supervisor Hilda Solis, Chair  
Supervisor Mark Ridley-Thomas  
Supervisor Sheila Kuehl  
Supervisor Don Knabe  
Supervisor Michael D. Antonovich

From: Dave Chittenden  
Chief Deputy Director

### **ANNUAL CLEAN FUELS REPORT**

The Board of Supervisor's "Clean Fuels" policy was adopted on January 10, 1995. The policy requires that by March 1 of each year, departments report on the composition of their fleet and their progress toward acquiring clean fuel vehicles.

For Calendar Year (CY) 2015, Internal Services Department's (ISD's) report (Attachment I) provides data on all of the County departments and vehicles for which ISD provides automotive services. County departments that maintain their own vehicles (Sheriff, Public Works, and Fire) will report separately.

Overall, the ISD-maintained motor vehicle fleet includes 3,973 vehicles, of which 1,128 (28.4%) are alternative fuel vehicles (AFVs) including 13 Plug-in Hybrid Electric Vehicles. Passenger vehicles in the ISD-maintained fleet total 1,324 of which 817 (61.7%) are AFVs, and include hybrid, plug-in hybrid, electric, natural gas, bi-fuel, flex-fuel and propane. Also reflected is information captured to date on certified low emission vehicles (LEV's), ultra-low emission vehicles (ULEV's), and super ultra-low emission vehicles (SULEV's) as defined by the California Air Resources Board (CARB).

### **Overview for 2015**

A brief summary of activities regarding County vehicle fleet and progress towards clean fuel vehicles is provided below. Additional details on these items are included in Attachment II.

- **Revised Board Policy 3.020 Clean Fuel – Sustainable Fleet** – Policy revisions adopted June 30, 2015 included enhanced clean vehicle standards for all non-emergency light vehicles and vehicle replacement standards.
- **Acquisition of Plug-in Hybrid and Regular Hybrid Vehicles** – Eleven plug-in hybrid sedans were placed into the ISD managed Motor Pool.

- **Electric Vehicle Supply Equipment (EVSE) Infrastructure** – Since our last report, there has been a significant increase in use of the majority of the County EVSE units. More County EVSE sites and units are being planned to support County and public use of plug-in hybrid and all electric vehicles.
- **Fuel Management and Control System County-wide** – A number of departmental fuel sites were implemented in 2015, including Parks and Recreation and Public Works fuel sites. Work on remaining sites at these departments and additional units at the Fire Department will continue through 2016.
- **Compressed Natural Gas (CNG) Fuel Site assessment/modernization** – The Civic Center CNG site continues to support public and government CNG vehicles; however, growth needs, replacement and maintenance costs are being analyzed.
- **Fuel Facility regulation compliance** – ISD fuel sites maintained full compliance with all regulations.
- **Departmental Fleet Reviews** – ISD continues to provide County departments whose vehicles are maintained by ISD with support on vehicle purchases and vehicle utilization information as needed.
- **Vehicle Replacement Plan** – In support of the Board's adoption of vehicle replacement standards within the Clean Fuels Policy, the Chief Executive Office provided \$4.6M in NCC funding for the initial phase of 166 light duty vehicle replacements in FY 15-16.
- **Rebates** – Thirty rebates were successfully reserved for the County's purchases of Plug-in Hybrid Electric Vehicles from the California Center for Sustainable Energy.

These activities assist the County with moving forward to improve sustainability and air quality in support of both Board Policy 3.020 Clean Fuel – Sustainable Fleet and California 2020 Greenhouse Gas Reduction Act goals.

### **Impact of County Actions**

With your Board's enhancements to the Clean Fuels Policy which began in December 2005 by making the hybrid or other alternative fueled vehicles as the standard for County operations effective July 2006, we have reported the environmental impact in terms of emissions avoidance since that time.

The results for CY 2015 are as follows:

Items Avoided	Results from Hybrids	Results from *CNG and **LPG	Combined Results
Gallons of Petroleum Fuel Avoided	97,103	5,656	102,759
Lbs of CO <sub>2</sub> Avoided	2,175,102	33,594	2,208,696

\*CNG – Compressed Natural Gas; \*\*LPG – Liquid Propane Gas

### **Exemptions**

The following departments have sought and acquired exemption from purchasing Hybrid/Alternate Fuel vehicles or Medium/Heavy Alternate Fuel vehicles.

Department Name	Exemptions Sought	Exemptions Approved	Vehicles Purchased
Mental Health	Five – Increase in Fleet Size (5 units)	Same	Prius

### **Other Required Reporting**

Passenger vehicles replaced in CY 2015 which exceeded \$50,000 in costs are shown on Attachment III. These vehicles are passenger vans which are wheelchair accessible, thus accounting for the higher than normal cost.

If you have any additional questions, please contact me at (323) 267-2103, or your staff may contact Joe Sandoval at (323) 267-2109, or via email [jsandoval@isd.lacounty.gov](mailto:jsandoval@isd.lacounty.gov).

DC:JS:MN:rm

Attachments

c: ISD Board Deputies  
Chief Executive Office  
Chief Operating Officer  
Executive Office, Board of Supervisors  
Department Heads  
Administrative Deputies  
Vehicle Coordinators

**Fuel Type - Emiss Cert Summary  
2015**

Department Name	ALTERNATE FUEL VEHICLES (AFV)										Grand Total	Total AFV	AFV as % of Total	Emission Certification
	GAS	DIESEL	LPG/ PROPANE	PROPANE/ GAS	HYBRID ELECTRIC/ GAS	ETHANOL/ GAS	ELECTRIC ONLY	CNG/ GAS	CNG	PLUG-IN HYBRID				
Agricultural Commissioner	294	13			6	9					322	15	4.7%	198
Alternate Public Defender	2				2						4	2	50.0%	4
Animal Control	47				9	46			1		103	56	54.4%	80
Assessor	7				1						8	1	12.5%	3
Auditor-Controller	4				1						5	1	20.0%	3
Beaches & Harbors	82	8			6	36					132	42	31.8%	70
Board of Supervisors	23				57	1					81	58	71.6%	64
Chief Executive Office	6	1			6	3					16	9	56.3%	11
Child Support Svcs	7					2					9	2	22.2%	6
Children and Family Services	70				1	9					80	10	12.5%	47
Community & Senior Services	45				9	6					60	15	25.0%	36
Coroner	21	4			3	29					57	32	56.1%	36
County Counsel	1										1	0	0.0%	1
District Attorney	228				4	98					330	102	30.9%	268
Health Services	285	41			6	7	1				340	14	4.1%	107
Human Resources	1										1	0	0.0%	1
Internal Services	483	11		1	31	72	2		12	13	625	131	21.0%	524
Mental Health	136				150	17					303	167	55.1%	173
Military & Veteran Affairs	1				1						2	1	50.0%	1
Museum of Natural History	11										11	0	0.0%	2
Parks & Recreation	514	6	1		23	22		2	6		574	54	9.4%	350
Probation	278	3			86	228					595	314	52.8%	299
Public Defender	2					5					7	5	71.4%	3
Public Health	88	2			53	21			1		165	75	45.5%	104
Public Library	52	1			2	6					61	8	13.1%	34
Public Social Services	17					2					19	2	10.5%	14
Regional Planning	1				3						4	3	75.0%	2
Registrar-Recorder/County Clerk	43	2			6						51	6	11.8%	32
Treasurer/Tax Collector	4				3						7	3	42.9%	2
<b>Grand Total</b>	<b>2,753</b>	<b>92</b>	<b>1</b>	<b>1</b>	<b>469</b>	<b>619</b>	<b>3</b>	<b>2</b>	<b>20</b>	<b>13</b>	<b>3,973</b>	<b>1,128</b>	<b>28.4%</b>	<b>2,475</b>

### **Additional Details for 2015 County Activities**

The following sections provide additional details for the 2015 County activities as direct result of or related to Board Policy 3.020 Clean Fuel – Sustainable Fleet and vehicle-related actions.

#### **Board Policy 3.020 Revision**

In 2014, ISD engaged a fleet consultant to assess ISD supported light duty vehicles and provide recommended light duty vehicle replacement standards based on industry standards and total costs of ownership analysis. Based on the results of this report, the light duty vehicle replacement standards and approach for implementation have been established, and approved by the Board.

On June 30, 2015 on the motion by Supervisor Knabe, the Board approved a revision to Board Policy 3.020 – Clean Fuel Policy resulting in the policy renaming to “Clean Fuel – Sustainable Fleet” and two significant changes:

- A. Enhanced Vehicle Standards – The revised Board Policy 3.020 Clean Fuel – Sustainable Fleet moves beyond the 2005 established standard for new non-emergency passenger sedans as the gasoline-electric hybrid. It also establishes a standard of 10% of new non-emergency vehicles to be powered by alternative fuel including but not limited to Compressed Natural Gas (CNG), Hydrogen, Plug-in Hybrid Electric, Dedicated Electric and Dedicated Liquefied Petroleum (Propane) fuels and maximum CO<sub>2</sub> output for each vehicle type. Departments wishing to deviate from these standards must submit and have approved by the Chief Executive Office a request for exception prior to purchasing the vehicle(s).
- B. Vehicle Replacement Standards – The newly revised Board Policy 3.020 also sets light duty vehicle replacement standards for light duty County vehicles for the first time since 1968. The replacement standards are:

<b>Vehicle Class</b>	<b>Years</b>	<b>Mileage</b>
Emergency Vehicle	7	110,000
Sedan	8	115,000
SUV	8	105,000
Van	8	105,000
Truck – Light Duty	9	110,000

The Policy also sets the requirement for replacing vehicles “in-kind” and identifies “low-usage” vehicles as less than 5,000 miles/year use. Such low usage vehicles should be evaluated for disposal or reassignment based on the needs of the department.

Subsequent to the policy revision, the CEO allocated \$4.6M in NCC funding for the initial phase of light duty vehicle replacements in FY 15-16. ISD is working closely with our customer departments to complete replacement vehicle orders and place vehicles into service as expeditiously as possible.

#### **Plug-in Hybrid and Regular Hybrid Vehicles**

In support of the California greenhouse gas reduction target to achieve 1990 emission levels by 2020, ISD continues to explore AFVs, pilot new technologies, educate County departments, and

recommend/amend the Clean Fuels Program Policy or County Vehicle Policy as necessary. In this regard, County initiatives in 2015 included:

- The CEO authorized \$400,000 for ISD to purchase Plug-in Hybrid vehicles for use in its Motor Pool. Eleven Plug-in Hybrid Electric Vehicles were acquired. This consisted of six Ford Fusions and five Ford C-Max vehicles. These vehicles were placed into Motor Pool service at the Hall of Administration and at ISD's Eastern Avenue automotive service facility. At the time of writing, these vehicles are averaging 64 miles per gallon (MPG). By comparison, the Ford Taurus sedans which these PHEVs replaced were averaging 25 MPG.
- ISD also continued to assist County departments and employees with the acquisition of AFVs in support of the County's Clean Fuels policy, including:
  - The acquisition of 79 additional hybrid sedans on behalf of County departments for Calendar Year (CY) 2015.
  - The Vehicle Purchasing Services Program allows County employees to purchase hybrid vehicles at discounted pricing. The total number of hybrid vehicles purchased by County employees under this program thus far is 359.
- During CY 2015, ISD and other County departments successfully reserved 30 rebates (the maximum available) from the California Center for Sustainable Energy for purchases of Plug-in Hybrid Electric Vehicles. This resulted in \$157,500 in rebates realized by the County.

### **Electric Vehicle Supply Equipment Infrastructure**

The County's current Electric Vehicle Supply Equipment (EVSE) network was established in 2014 at over 30 facilities. It is successfully providing electric and plug-in hybrid electric vehicles with electric charge for both County vehicles and public vehicles including those of employees. The program has been widely successful. Initial collaboration resulted in the addition of three more EVSE charging units at the Hall of Administration and one EVSE charging unit at Crescenta Valley Sheriff station.

ISD's County Office of Sustainability continues to collaborate with County departments and to identify funding sources to expand the EVSE network to more County locations. County departments are expressing interest in expanding the EVSE network include Public Works, Registrar-Recorder, Health Services, and Children and Family Services.

### **County Fuel Management and Control System**

An automated fuel management and control system (Fuel Focus) was initially implemented in August 2010 at ISD's three fuel sites. The objectives of this fuel system are to reduce fuel losses and improve interdepartmental fuel availability through more accurate dispensing and inventory records, shared vehicle information, and standardization of fueling facilities. An example of this benefit is demonstrated by Public Works' agreement to change one of their diesel dispenser nozzles to accommodate fueling by DHS ambulances at their Lomita yard. Prior to this, ambulances were dependent on retail fueling facilities in the South Bay area.



- As of March 2013, all of the Sheriff department's 29 fuel sites were upgraded to the Fuel Focus system.
- Beaches and Harbors, final of seven fuel sites, completed installation of Fuel Focus and went live in February 2015.
- For CY 2015, four of six Parks & Recreation fuel sites were equipped with Fuel Focus. The remaining two sites will be completed by the end of FY 15-16.
- Public Works began implementation of Fuel Focus controls at 40 of their fuel sites. As of January 2016, five of their sites have been completed. The remaining sites are anticipated to be completed by the end of CY 2016.
- Fire Department has implemented Fuel Focus at their Pacoima regional operations facility. Fire is also considering and evaluating cost estimates for installing Fuel Focus at five of their high-volume Fire Stations.

**Compressed Natural Gas (CNG) Fuel Site**

The County's CNG fueling site located at 1055 North Alameda in downtown Los Angeles has essentially served as the only public CNG fueling site available to public citizens, the County and City of Los Angeles, other government agencies, utilities and private businesses since opening in 2001 under contract with Clean Energy Fuels.

The CNG station was originally designed to provide adequate fueling support for limited capacity CNG-powered vehicles and moderate growth in CNG vehicle usage within the Los Angeles Civic Center area. However, significant advancements in CNG technology applications have been made which include significantly larger vehicles (e.g., shuttle buses, large and heavy duty trucks), and combined with increased number of CNG-powered vehicles, the output capability of this CNG station negatively is impacted. This results in slower and incomplete fuel tank fills. Additionally, the aged equipment experiences increasingly frequent failures and replacement parts are difficult to obtain.

The current contract which was competitively bid and awarded in July 2007 to Clean Energy for maintenance and repairs of this CNG fuel station, shall complete all terms by January 28, 2017, if all extensions are utilized.

This past year, ISD engaged a consultant specializing in CNG fuel station construction and operations. This consultant, Go Natural Gas Incorporated (GNG, Inc.), was tasked to provide information on potential options and analysis to determine the best model for continued CNG stations. GNG, Inc. recommended replacement of current equipment because current equipment is expected to have increased downtime, excessing maintenance costs, and not be fully capable to provide for additional dispensing needs.

The final one-year extension has been exercised. ISD is currently exploring alternatives to update the CNG station to accommodate current needs and reduce maintenance cost.

**Regulations for Diesel Vehicles/Equipment**

ISD maintained 94 diesel vehicles of which 81 are impacted by the CARB Public Fleet and Utilities rule (January 5, 2007, regulations) for the following County departments: Agricultural Commissioner/Weights and Measures, Beaches and Harbors, Chief Executive Office, Coroner, Health Services, ISD, Museum of Natural History, Parks and Recreation, Probation, Public Health, Public Library, and Registrar-Recorder.

ISD has worked closely with these departments to successfully meet all CARB compliance requirements for affected ISD-maintained fleet vehicles within the required deadline. For CY 2015, each responsible department with documented low usage vehicles has re-certified their low usage exemption and two diesel vehicles were salvaged.

**ISD Fuel Facilities - Regulation Compliance**

ISD operates three fuel facilities, which support daily fueling for all County vehicles and County emergency preparedness. Fuel facilities are regulated by the CARB, the California Water Board, and the SCAQMD to ensure fuel sites meet equipment standards and control emissions.

ISD fuel facilities are in full compliance with all regulations including the SCAQMD's Enhanced Vapor Recovery (EVR) Phase I (fuel storage) and Phase II (refueling vehicles) which was required for all gasoline dispensing facilities by April 1, 2009. The Mall Garage fuel site was completed in June 2012 following SCAQMD's identification and approval of the required equipment for liquid condensate traps with underground dispensing.

**Fleet Reviews**

ISD conducted Vehicle Fleet Review meetings with customer departments throughout 2015, which include a review of the departments' vehicle utilization, preventative maintenance standards and status, specialized vehicle service needs (as applicable), cost review, M4 Fleet system information availability and uses, and recommendations for consideration. For example, low usage vehicles (under 5,000 miles annually), excess usage (over 20,000 miles annually), and vehicle replacement considerations including right sizing the vehicle fleet are examined.

ISD has reduced its vehicle fleet by 294 vehicles since January 2010. Some vehicles (118 as of January 2015) have been transferred to other County departments to replace very old or high mileage units. Overall, County vehicle emissions and fuel economy are improved with these transfers/replacements.



**Passenger Vehicles Purchased Exceeding \$50,000**

Department	Category	Qty	PO Amount	Comments
Beaches & Harbor	Van	1	\$52,242.14	Wheelchair accessible van
Health Services	Van	1	\$62,824.48	Wheelchair accessible van
Community & Senior Services	Van	1	\$66,490.81	Wheelchair accessible van